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APR 17 1969

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# **WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO**

and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE  
and  
COLORADO AGRICULTURAL EXPERIMENT STATION  
STATE ENGINEER of COLORADO  
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State, and private organizations.

AS OF  
APR. 1, 1969

## TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

## PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85205
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80521
Idaho	P. O. Box 38, Boise, Idaho 83707
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Building, Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 340, Casper, Wyoming 82602

## PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



# **WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO**

and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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### WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

### WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Mosca Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts.

### WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Lower Cebolla, Abiquiu-Vallecitos, Eastern Taos, Lindrith, Coyote-Canones, Espanola Valley, Pojoaque, Jemez, Santa Fe-Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

### WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

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### WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, Plateau Valley, South Side, and Mt. Sopris Soil Conservation Districts.

### WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

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# WATER SUPPLY OUTLOOK

as of  
April 1, 1969



The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

# WATER SUPPLY CONDITIONS

as of

April 1, 1969

SNOWFALL ON THE EASTERN SLOPE OF COLORADO WAS BELOW NORMAL DURING MARCH. THE RIO GRANDE AND SAN JUAN DRAINAGES OF NEW MEXICO HAD BETTER THAN AVERAGE SNOWFALL. SOILS IN THE IRRIGATED AREAS ARE REPORTED TO BE IN POOR CONDITION IN THE EASTERN HALF OF BOTH STATES, BUT SOMEWHAT BETTER IN THE WEST. CARRY-OVER RESERVOIR STORAGE IS AVERAGE OR BETTER IN ALL AREAS EXCEPT THE ARKANSAS DRAINAGE. NO SERIOUS WATER SHORTAGES ARE EXPECTED, HOWEVER, SOME DEFICIENCIES ARE EXPECTED ON THE EASTERN SLOPES.



COLORADO --

STREAMFLOW FORECASTS WERE LOWERED ABOUT 10% ON ALL STREAMS THAT FLOW TO THE EASTERN PLAINS. GENERALLY FORECASTS ARE ABOVE NORMAL ON THE WESTERN SLOPE. THE GRAND MESA AND SOUTHWESTERN CORNER OF THE STATE HAVE EXCELLENT SNOW PACKS. SOME OF THE SNOW COURSES ON GRAND MESA ARE APPROACHING A MAXIMUM OF RECORD. SOIL MOISTURE IN THE IRRIGATED AREAS OF THE EASTERN SLOPE IS DEFICIENT, BUT REPORTED GOOD IN THE WEST. ONLY ABOUT A MONTH OF SNOW WEATHER REMAINS.



NEW MEXICO --

WATER SUPPLIES IN ALL OF NEW MEXICO SHOULD BE BETTER THAN AVERAGE THIS SUMMER. SNOWFALL WAS BETTER THAN NORMAL DURING MARCH. IF APRIL SHOWS CONTINUED IMPROVEMENT, SUMMER WATER SUPPLIES SHOULD BE EXCELLENT. RESERVOIR STORAGE ON THE MAINSTEM OF THE RIO GRANDE IS SLIGHTLY BELOW NORMAL. THE PECOS AND CANADIAN DRAINAGES BOTH HAVE BELOW NORMAL RESERVOIR STORAGE. SOILS IN THE IRRIGATED AREAS OF THE STATE ARE IN FAIR CONDITION.

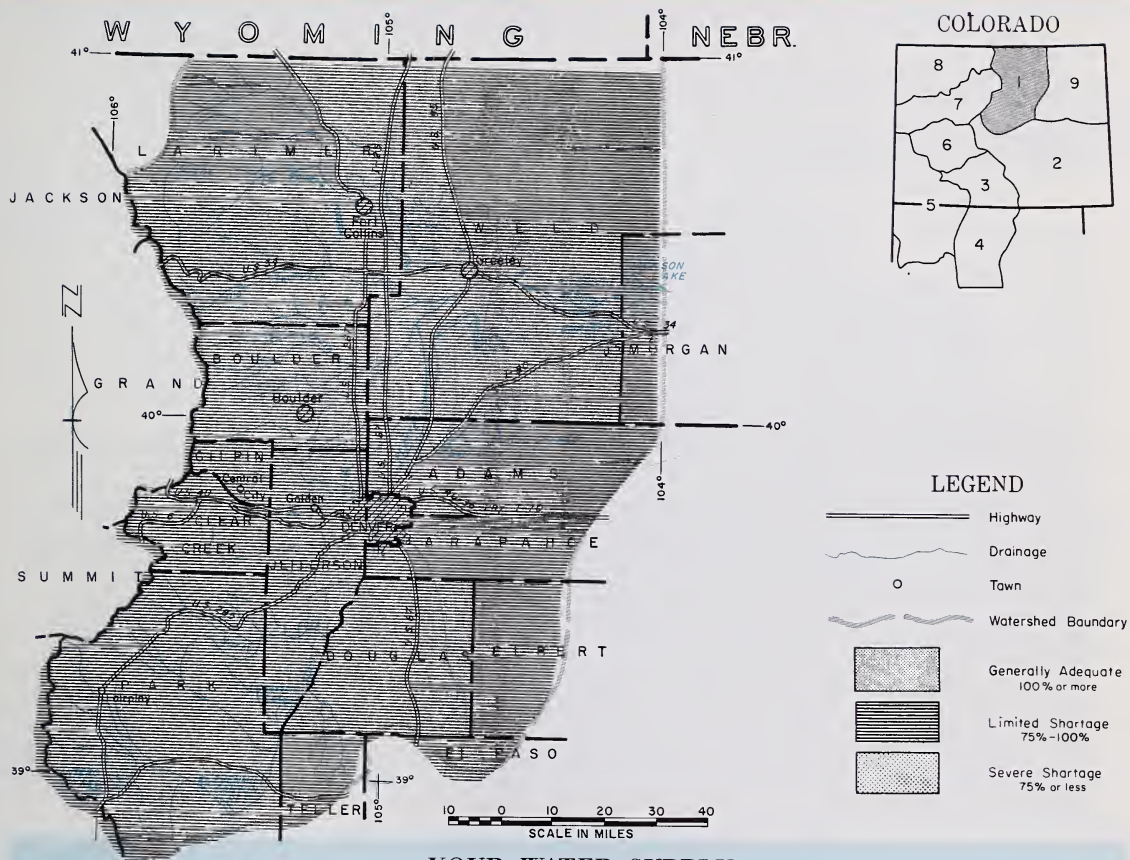


# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

April 1, 1969

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



## YOUR WATER SUPPLY

SNOWFALL FELL OFF SHARPLY DURING MARCH ON THE SOUTH PLATTE DRAINAGE. SOME SNOW COURSES SHOW PRACTICALLY NO GAIN DURING THE MONTH. THE LAST TEN DAYS OF THE MONTH WERE UNSEASONABLY WARM, STARTING THE PACK MELTING A MONTH AHEAD OF TIME. FORECASTS WERE LOWERED ON ALL STREAMS BY ABOUT 10%. RESERVOIR STORAGE REMAINS GOOD, HOWEVER, WATER SUPPLIES MAY BE MARGINAL UNLESS APRIL SNOWFALL IS MUCH ABOVE NORMAL. VALLEY SOILS ARE REPORTED TO BE IN POOR TO FAIR CONDITION.

This report prepared by  
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DENVER, COLORADO DENVER, COLORADO

*The Conservation of Water begins with the Snow Survey*

# STREAMFLOW FORECASTS (1,000 Ac.Ft.)

# WATER SUPPLY OUTLOOK expressed "Poor,Avg,Good"

STREAM and STATION	FORECAST	THIS YEAR % AVE.	IS YR. AVE. 1953-67
Big Thompson at Drake (2)	85	85	100
Boulder at Orodell	42	85	49
Cache La Poudre at Canon Mouth (1)	178	83	215
Clear Creek at Golden (3)	95	80	119
Saint Vrain at Lyons	55	79	70

(1) Observed flow minus trans-basin diversions.  
 (2) Observed flow plus by-pass to power plants.  
 (3) Observed flow minus diversions through Jones Pass.

STREAM	FLOW PERIOD	
	April May	June Thru Sept.
Bear Creek	Avg.	Poor
Coal Creek	Avg.	Poor
Deer Creek	Avg.	Poor
North Fork of So. Platte	Avg.	Poor
North Fork of Cache La Poudre	Avg.	Poor
Ralston Creek	Avg.	Poor
Rock Creek	Avg.	Poor

## SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES AVERAGED	THIS YEARS SNOW AS PERCENT OF	
		Last Year	Average
Boulder	3	59	73
Big Thompson	5	91	82
Cache La Poudre	7	95	91
Clear Creek	5	75	77
Saint Vrain	3	66	56
South Platte	3	85	79

## AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of STATIONS	THIS YEARS MOISTURE AS PERCENT OF	
		Last Year	Average
South Platte	2	94	103
Clear Creek	2	91	101
Boulder	1	73	94
Saint Vrain	2	74	96
Big Thompson	3	76	88
Cache La Poudre	2	91	96

## RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	IS YEAR AVE. 1953-67
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	26.0	28.5	21.1
Black Hollow	8.0	3.5	3.5	3.3
Boyd Lake	44.0	38.7	41.9	27.6
Cache La Poudre	9.5	6.5	8.9	7.5
Carter Lake	108.9	91.8	98.9	81.7
Chambers Lake	8.8	2.9	3.3	3.0
Cheesman	79.0	43.2	41.3	49.0
Cobb Lake	34.3	14.7	19.3	9.9
Eleven Mile	97.8	94.6	93.3	72.1
Fossil Creek	11.6	7.3	8.1	7.0
Gross	43.1	34.4	30.2	22.4

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	IS YEAR AVE. 1953-67
Halligan	6.4	5.7	5.5	4.7
Horsetooth	143.5	110.4	111.6	106.8
Lake Loveland	14.3	4.2	12.8	8.4
Lone Tree	9.2	2.3	8.6	6.6
Mariano	5.4	5.6	5.6	4.2
Marshall	10.3	2.7	5.0	3.0
Marston	18.0	15.0	14.8	14.7
Milton	24.4	15.8	17.4	10.8
Standley	42.0	26.2	31.6	11.0
Terry Lake	8.2	4.5	6.2	5.0
Union	12.7	3.3	12.0	7.6
Windsor	18.6	11.0	14.7	9.9

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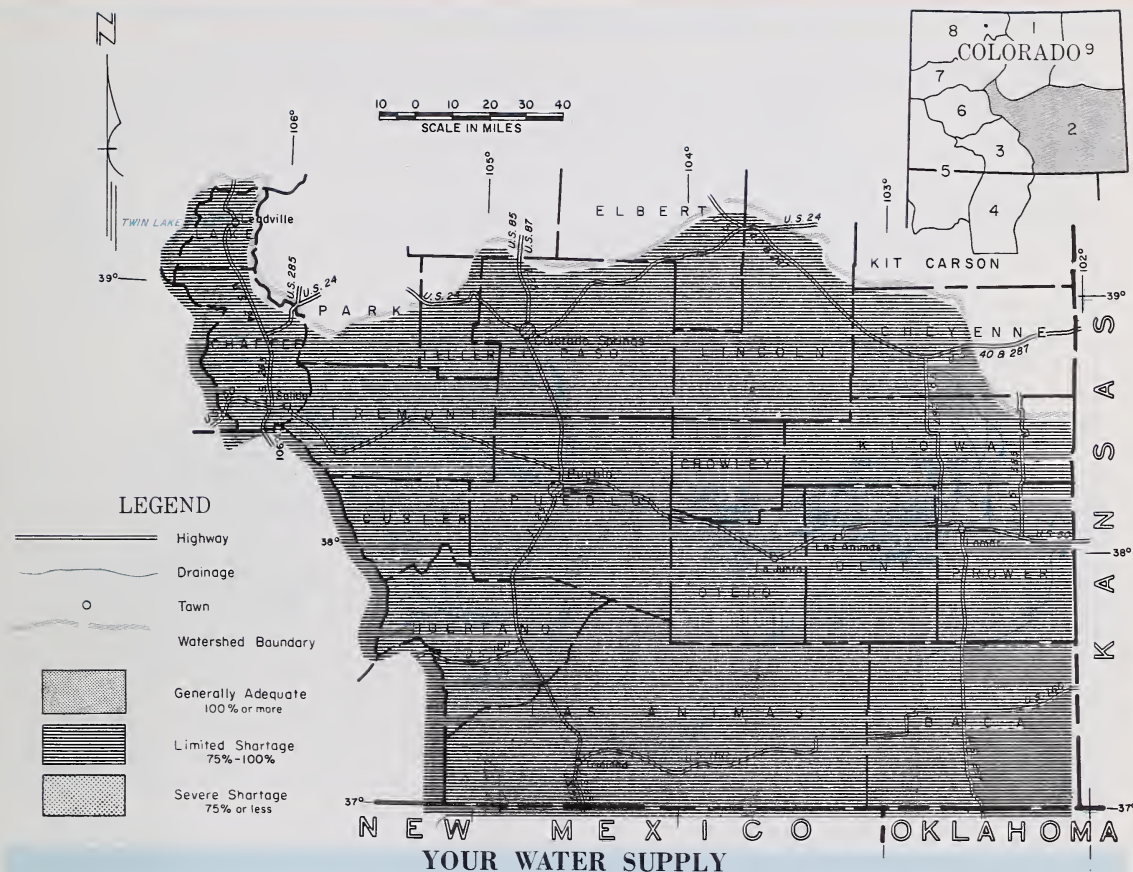


# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE ARKANSAS RIVER WATERSHED IN COLORADO

as of

April 1, 1969

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



THE SOUTHERN TRIBUTARIES RECEIVED GOOD SNOWFALL DURING THE MONTH, BUT THE MAIN-STEM OF THE ARKANSAS RECEIVED LESS THAN NORMAL AMOUNTS. STREAMFLOW SHOULD STILL BE NEAR AVERAGE TO SLIGHTLY BELOW. RESERVOIR CARRY-OVER IS POOR. MUCH ADDITIONAL SNOWFALL IS NEEDED TO INSURE ADEQUATE WATER SUPPLIES THIS SUMMER. VALLEY SOIL MOISTURE IS REPORTED TO BE FAIR TO POOR EXCEPT IN THE TRINIDAD AND LAS ANIMAS AREAS. HERE REPORTS ARE MORE FAVORABLE. ONLY ABOUT A MONTH REMAINS TO ADD MUCH NEEDED SNOW TO THE MOUNTAIN RANGES.

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*The Conservation of Water begins with the Snow Survey*

# STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr - Sept

STREAM and STATION	FORE CAST	THIS YEAR % AVE.	15 YR. AVE. 1953-67
Arkansas nr Pueblo (4)	280	94	298
Arkansas at Salida (4)	290	94	309
Cucharas nr LaVeta	11	92	12
Purgatoire at Trinidad	50	109	46

(4) Observed flow plus change in Clear Creek, Twin Lakes, and Sugar Loaf Reservoirs minus diversions through Busk - Ivanhoe and Twin Lake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

# WATER SUPPLY OUTLOOK expressed "Poor, Avg, Good "

STREAM	FLOW PERIOD	
	April May	June Thru Sept.
Apishapa	Avg.	Avg.
Fountain Creek	Avg.	Avg.
Grape Creek	Avg.	Avg.
Hardscrable Creek	Avg.	Avg.
Huerfano	Avg.	Avg.
Monument Creek	Avg.	Avg.

## SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES AVERAGED	THIS YEARS SNOW AS PERCENT OF	
		Last Year	Average
Arkansas	10	84	93
Cucharas and Purgatoire	2	84	124

## AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of STATIONS	THIS YEARS MOISTURE AS PERCENT OF	
		Last Year	Average
Arkansas	3	47	69
Cucharas and Purgatoire	1	109	136

## RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1953-67
Adobe Creek	61.6	0.0	6.5	11.1
Clear Creek	11.4	8.0	8.4	7.3
Cucharas	40.0	0.7	0.0	3.3
Great Plains	150.0	6.3	53.7	38.3
Horse Creek	26.9	0.0	0.4	4.9

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1953-67
John Martin	353.9	18.9	42.6	89.4
Meredith	41.9	0.0	2.1	10.0
Model	15.0	1.5	3.6	3.1
Turquoise	130.0	31.4	20.4	7.5
Twin Lakes	57.9	26.7	29.6	19.9

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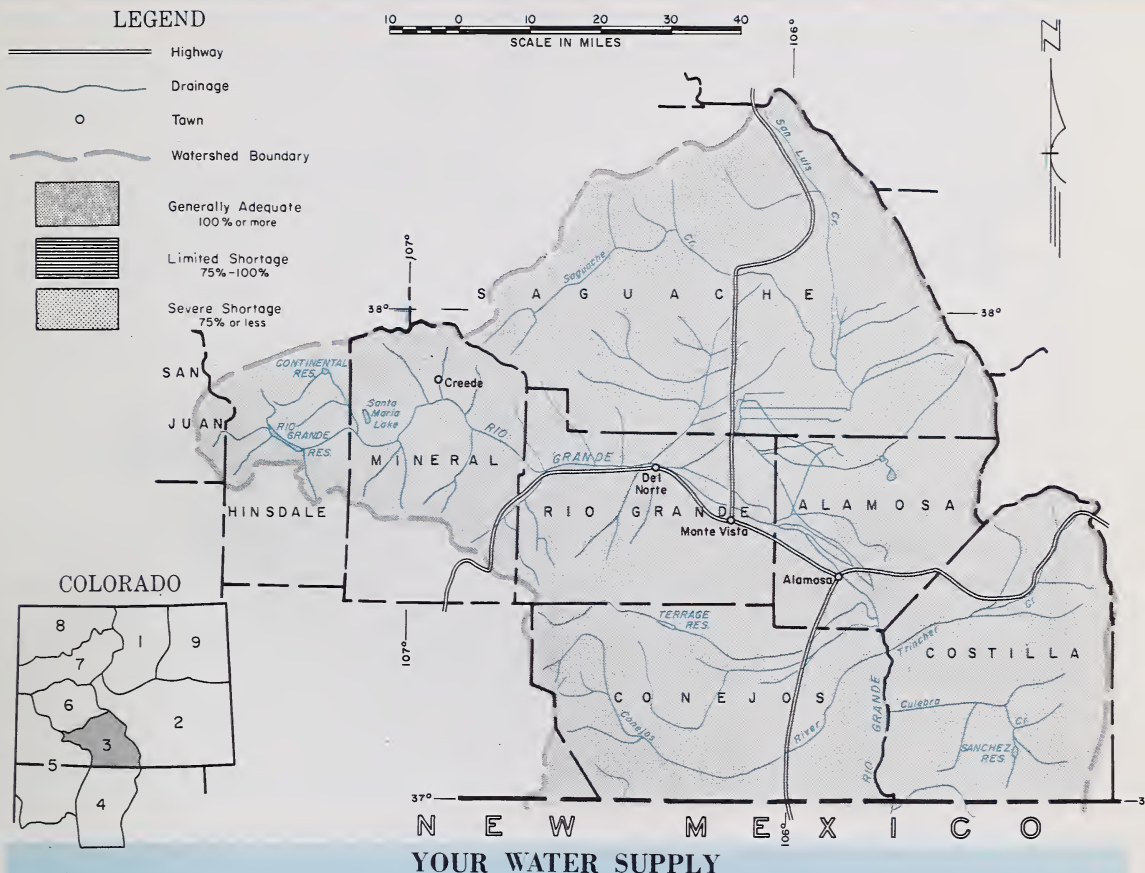
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# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE UPPER RIO GRANDE WATERSHED IN COLORADO

as of  
April 1, 1969

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



THE SNOWPACK ON THE UPPER RIO GRANDE CONTINUES TO BE ABOVE NORMAL THIS MONTH. SNOWFALL WAS NORMAL DURING THE MONTH ON ALL STREAMS EXCEPT THE CULEBRA, WHICH HAD CONSIDERABLY ABOVE AVERAGE. STREAMFLOW FORECASTS WERE DECREASED SLIGHTLY ON THE CONEJOS AND INCREASED ON ALL OTHER STREAMS.

CARRY-OVER RESERVOIR STORAGE IS 160% OF LAST YEAR AND 132% OF NORMAL. MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED AS FAIR.

This report prepared by

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DENVER, COLORADO OURANGO, COLORADO

*The Conservation of Water begins with the Snow Survey*

# STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr - Sept

# WATER SUPPLY OUTLOOK expressed "Poor, Avg, Good"

STREAM and STATION	FORE CAST	THIS YEAR % AVE.	15 YR. AVE. 1953-67
Alamosa abv Terrace	85	137	62
Conejos nr Mogote	240	132	182
Culebra at San Luis (6)	25	132	19
Rio Grande at 30 Mile Bridge (5)	144	123	117
Rio Grande nr Del Norte (5)	530	121	438
South Fork at South Fork	145	132	110
(5) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoir.			
(6) Observed flow plus changes in storage in Sanchez Reservoir.			

STREAM	FLOW PERIOD	
	April May	June Thru Sept.
Saguache Creek	Good	Good
Sangre de Cristo Creek	Good	Good
Trinchera Creek	Good	Good

## SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES AVERAGED	THIS YEARS SNOW AS PERCENT OF	
		Last Year	Average
Alamosa	2	113	117
Conejos	3	133	138
Culebra	2	111	136
Rio Grande	10	107	120

## AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of STATIONS	THIS YEARS MOISTURE AS PERCENT OF	
		Last Year	Average
Alamosa	2	101	102
Conejos	1	160	150
Culebra	2	109	116
Rio Grande	3	106	113

## RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1953-67
Continental	26.7	7.0	4.5	5.1
Platoro	60.0	3.0	3.0	7.1
Rio Grande	45.8	22.4	8.7	13.3

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1953-67
Sanchez	103.2	13.8	12.5	11.1
Santa Maria	45.0	4.3	2.9	6.0
Terrace	17.7	11.2	7.0	4.1

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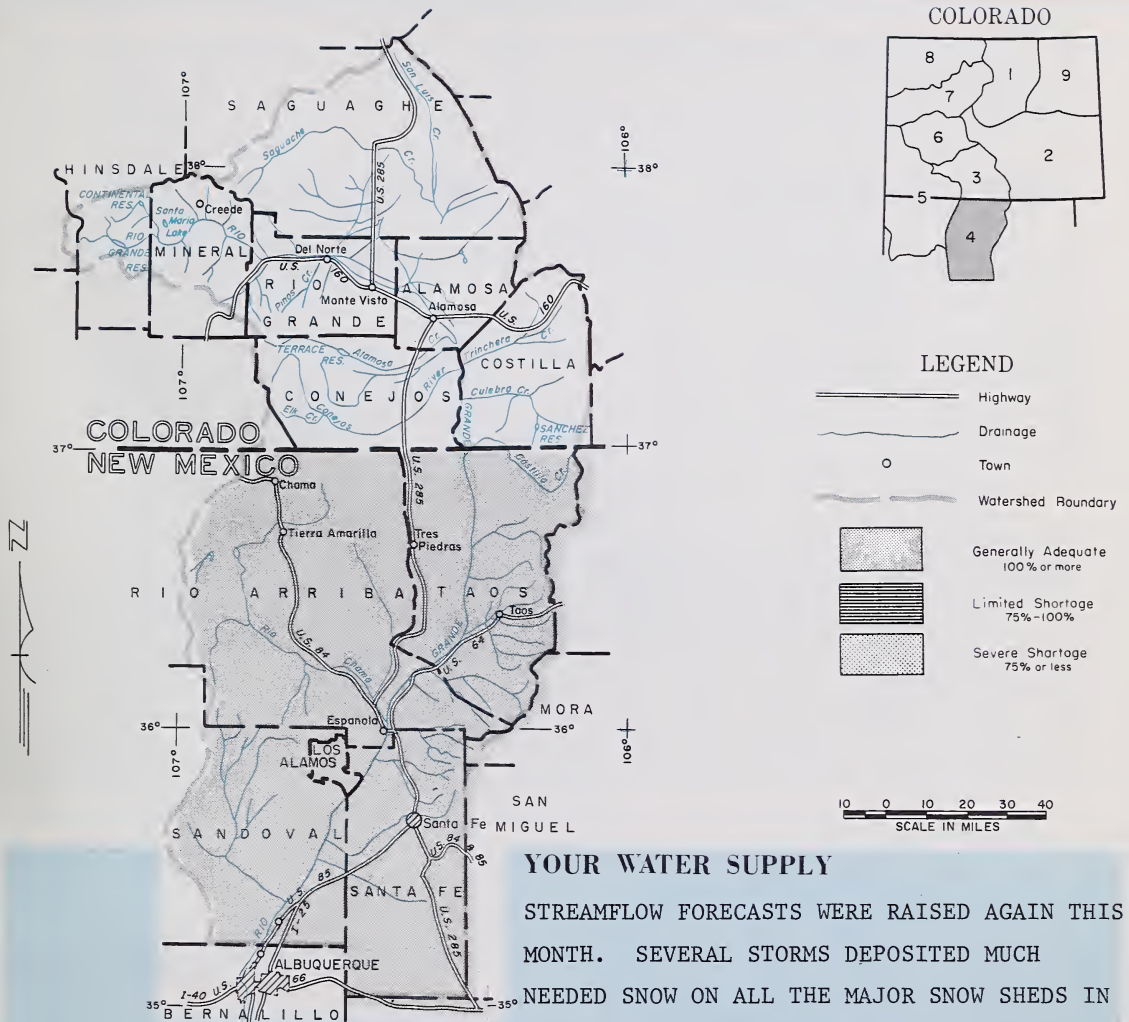
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# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE RIO GRANDE WATERSHED IN NEW MEXICO

as of  
April 1, 1969

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



STREAMFLOW FORECASTS WERE RAISED AGAIN THIS MONTH. SEVERAL STORMS DEPOSITED MUCH NEEDED SNOW ON ALL THE MAJOR SNOW SHEDS IN NEW MEXICO. ALL STREAMS ARE NOW EXPECTED TO FLOW BETTER THAN AVERAGE. THE CHAMA HAS A NEAR RECORD SNOW PACK. REPORTS INDICATE VALLEY SOILS ARE IN POOR CONDITIONS. GENERALLY CARRY-OVER STORAGE IN MAJOR RESERVOIRS IS BELOW NORMAL.

This report prepared by

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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE  
ALBUQUERQUE, NEW MEXICO SANTA FE, NEW MEXICO

*The Conservation of Water begins with the Snow Survey*



# STREAMFLOW FORECASTS (1,000 Ac. Ft.)

STREAM and STATION	FORECAST AS INDICATED	THIS YEAR % AVE.	15 YR. AVE. 1953-67
Costilla at Costilla (8)	24	133	18
Pecos at Pecos	50	122	41
Rio Chama into El Vado	320	170	188
Rio Grande at Otowi (7)	740	144	513
Rio Gra. at San Mar (7)	550	165	334
Rio Hondo nr Valdez	18	120	15
Red Riv. at mouth nr Questa	39	122	32

The Forecast of the Rio Grande at San Marcial is --89%  
the Average used by the Elephant Butte Irrigation District.  
A - S is April through September.  
A - J is April through July.  
M - J is March through July.  
(7) Observed flow plus changes in storage in El Vado and Abiquiu Res.  
(8) Observed flow plus changes in storage in Costilla Reservoir.

# WATER SUPPLY OUTLOOK expressed "Poor, Avg, Good"

STREAM	FLOW PERIOD	
	March May	June July
Embudo	Good	Good
Jemez River	Good	Good
Mora River	Good	Good
Nambe Creek	Good	Good
Rio Ojo Caliente	Good	Good
Rio Pueblo de Taos	Good	Good
Santa Fe Creek	Good	Good

## SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES AVERAGED	THIS YEARS SNOW AS PERCENT OF	
		Last Year	Average
Pecos	1	60	230
Rio Chama	4	182	178
Rio Grande, N.M.	11	105	163
Rio Hondo	1	173	---
Red River	2	75	133

## AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of STATIONS	THIS YEARS MOISTURE AS PERCENT OF	
		Last Year	Average
Pecos	2	95	86
Rio Chama	1	75	105
Rio Grande	4	83	93
Red River	1	107	84

## RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1953-67
Alamogordo	111	36	42	64
Caballo	344	20	50	65
Conchas	273	125	185	161
Elephant Butte	2195	366	281	334

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1953-67
El Vado	195	4	1	6
McMillen-Avalon	32	23	25	22

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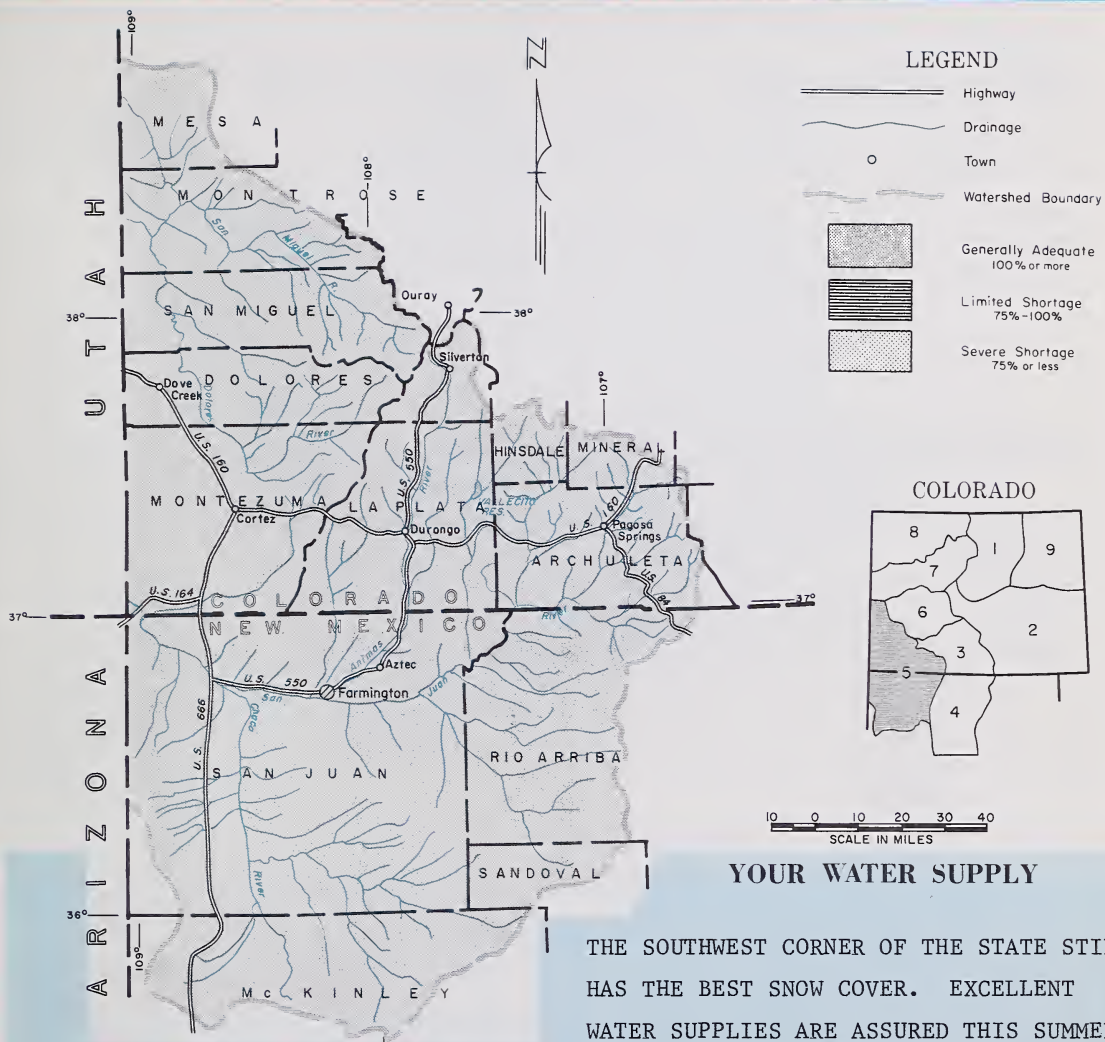
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# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SAN MIGUEL, DOLORES, ANIMAS, SAN JUAN WATER- SHEDS IN COLORADO AND NEW MEXICO

as of  
April 1, 1969

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



THE SOUTHWEST CORNER OF THE STATE STILL HAS THE BEST SNOW COVER. EXCELLENT WATER SUPPLIES ARE ASSURED THIS SUMMER. FORECASTS RANGE FROM 163% ON THE SAN JUAN TO 133% ON THE LA PLATA. SOILS IN THE IRRIGATED AREAS ARE REPORTED TO BE IN GOOD CONDITION. MOUNTAIN SOILS CONTAIN LESS THAN AVERAGE MOISTURE AND WILL REDUCE RUNOFF SLIGHTLY. RESERVOIR STORAGE IS ABOVE NORMAL IN ALL MAJOR RESERVOIRS.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND  
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*The Conservation of Water begins with the Snow Survey*

# STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr - Sept

# WATER SUPPLY OUTLOOK expressed "Poor, Avg, Good"

STREAM and STATION	FORE CAST	THIS YEAR % AVE.	15 YR. AVE. 1953-67
Animas at Durango	530	130	409
Dolores at Dolores	350	152	231
La Plata at Hesperus	32	133	24
Los Pinos at Bayfield (9)	275	142	194
Piedra Creek at Piedra	260	160	163
San Juan at Carracas	535	141	379
Inflow to Navajo Res.* (9)	1010	163	619
(9) Observed flow plus changes in storage in Vallecito Reservoir.			

STREAM	FLOW PERIOD	
	April May	June Thru Sept.
Florida	Good	Good
Mancos	Good	Good
San Miguel	Good	Good

\*(April - July)

## SUMMARY OF SNOW MEASUREMENTS

RIVER	NUMBER of COURSES AVERAGED	THIS YEARS SNOW AS PERCENT OF	
		Last Year	Average
Animas	6	112	141
Dolores	4	134	173
San Juan	5	141	137

## AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of STATIONS	THIS YEARS MOISTURE AS PERCENT OF	
		Last Year	Average
Animas	3	78	75
Dolores	2	43	57
San Juan	2	81	80

## RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1953-67
Groundhog	22.0	13.0	12.5	7.2
Lemon	40.0	20.9	16.8	15.1
Navajo	1696.4	818.0	595.5	293.1
Vallecito	126.0	70.4	38.9	49.5

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1953-67

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# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE GUNNISON RIVER WATERSHED IN COLORADO as of

April 1, 1969

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



STREAMFLOW FORECASTS ON THE GUNNISON RIVER IS 132% OF NORMAL WHILE ITS TRIBUTARIES, SURFACE CREEK AND UNCOMPAHGRE RIVER ARE 150% AND 143% RESPECTIVELY. SNOWFALL DURING THE MONTH WAS AGAIN ABOVE AVERAGE. SOME SNOW COURSES ON GRAND MESA ARE THE SECOND LARGEST ON RECORD. RESERVOIR STORAGE IS 121% OF LAST YEAR WITH BLUE MESA CONTAINING 442,000 ACRE FEET AND TAYLOR RESERVOIR CONTAINING 40,100 ACRE FEET. SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED AS GOOD.

This report prepared by  
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Issued by  
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DENVER, COLORADO  
GRAND JUNCTION, COLORADO

*The Conservation of Water begins with the Snow Survey*



# STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr - Sept

STREAM and STATION	FORE CAST	THIS YEAR % AVE.	15 YR. AVE. 1953-67
Gunnison nr Grand Junction	1500	132	1137
Surface Cr. nr Cedaridge	24	150	16
Uncomphagre at Colona	185	143	129

# WATER SUPPLY OUTLOOK expressed "Poor,Avg,Good "

STREAM	FLOW PERIOD	
	April May	June Thru Sept.
North Fork of Gunnison Taylor	Good Good	Good Good

## SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES AVERAGED	THIS YEARS SNOW AS PERCENT OF	
		Last Year	Average
Gunnison	12	127	130
Surface Creek	3	147	150
Uncompahgre	3	104	115

## AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of STATIONS	THIS YEARS MOISTURE AS PERCENT OF	
		Last Year	Average
Gunnison	1	54	79
Surface Creek	1	NS	100
Uncompahgre	1	NS	100

## RESERVOIR STORAGE ( 1,000 Ac. Ft. ) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1953-67
Blue Mesa	941.0	442.0	347.0	- -
Taylor	106.2	40.1	51.6	58.1

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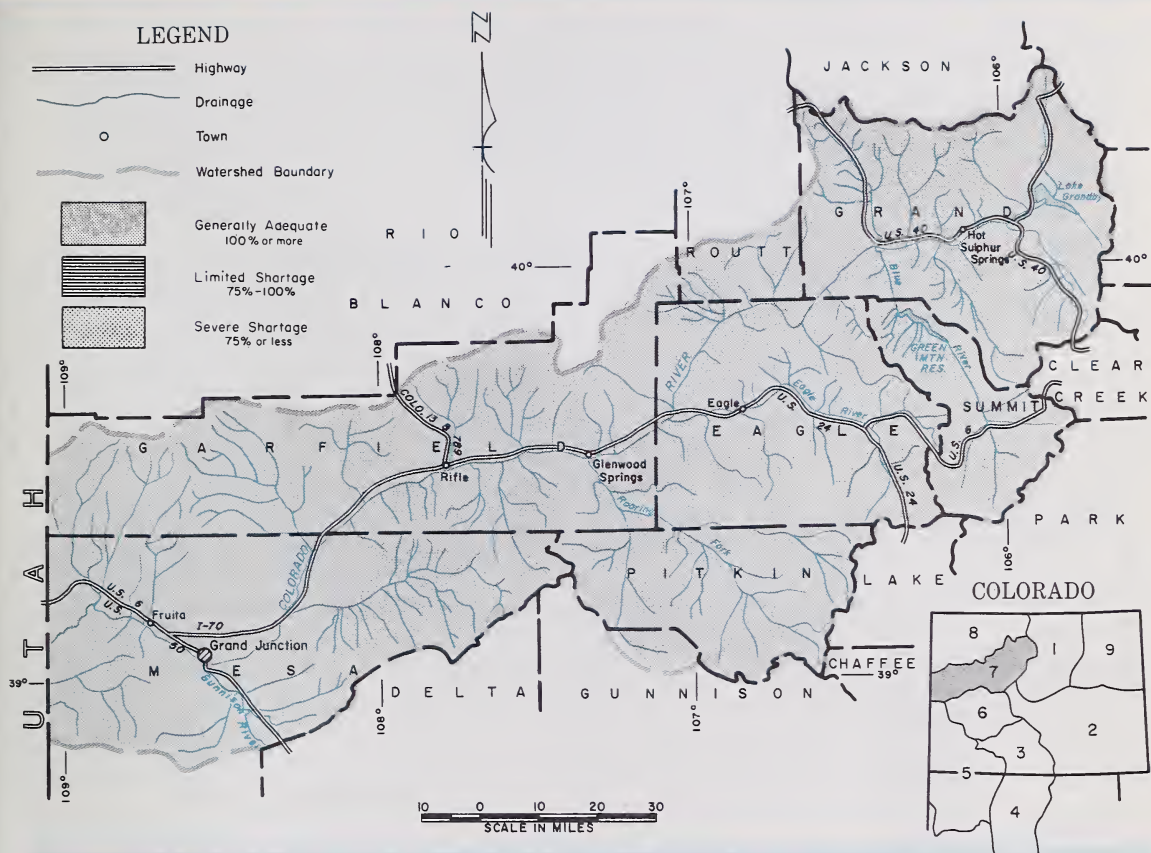


# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE COLORADO RIVER WATERSHED IN COLORADO

as of

April 1, 1969

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



## YOUR WATER SUPPLY

THE MONTH OF MARCH INDICATED EXTREMELY SPOTTY SNOW. SOME WATERSHEDS RECEIVED MORE THAN NORMAL SNOW WHILE ADJACENT DRAINAGES WERE DEFICIENT. WATER SUPPLIES SHOULD STILL BE ADEQUATE THIS SUMMER. FORECASTS OF THE APR-SEPT FLOWS RANGE FROM A LOW OF 91% ON THE BLUE TO A HIGH OF 126% ON THE ROARING FORK. SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED AS GOOD. RESERVOIR STORAGE IS ABOVE AVERAGE.

This report prepared by

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*The Conservation of Water begins with the Snow Survey*

# STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr-Sept

# WATER SUPPLY OUTLOOK expressed "Poor,Avg,Good "

STREAM and STATION	FORE CAST	THIS YR. % AVE.	15 YR. AVE. 1953-67
Blue Rv abv Green Mt (10)	215	91	236
Colo. Rv inflow to Granby Res. (11)	230	105	219
Colo. Rv. nr Dotsero (12)	1550	112	1375
Roaring Fk at Gl. Spr (14)	875	126	692
Will. Fk nr Parshall (15)	55	92	60
Will. Cr. Inflow to Will. Cr. Res.	55	120	46
Colo. nr Cameo (12)	2425	109	2216

(10) Observed flow plus change in storage in Dillon Reservoir.

(11) Observed flow diversions by Adams Tunnel and

Grand River Ditch plus change in storage in Granby Reservoir.

(12) Observed flow plus the changes as indicated in (11) plus Moffat Ditch.

(14) Observed flow plus diversion through Twin Lakes Tunnel.

(15) Observed flow plus diversions through Jones Pass Tunnel.

STREAM	FLOW PERIOD	
	April May	June Thru Sept.
Brush	Good	Good
Eagle River	Good	Good
Gypsum Creek	Good	Good

## SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES AVERAGED	THIS YEARS SNOW AS PERCENT OF	
		Last Year	Average
Blue River	8	89	88
Colorado	21	95	96
Roaring Fork	7	119	111
Williams Fork	2	111	115
Willow	2	116	108
Plateau	3	140	142

## AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of STATIONS	THIS YEARS MOISTURE AS PERCENT OF	
		Last Year	Average
Blue River	1	100	104
Colorado	4	113	117
Roaring Fork	1	65	75
Willow	1	140	100

## RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1953-67
Dillon	254.0	233.9	223.8	128.6
Granby	466.0	134.4	98.1	210.4
Green Mountain	147.0	63.7	64.7	50.6

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1953-67
Vega	32.1	11.0	3.0	10.3
Williams Fork	96.8	26.0	20.7	27.1
Willow Creek	9.0	7.2	8.7	6.3

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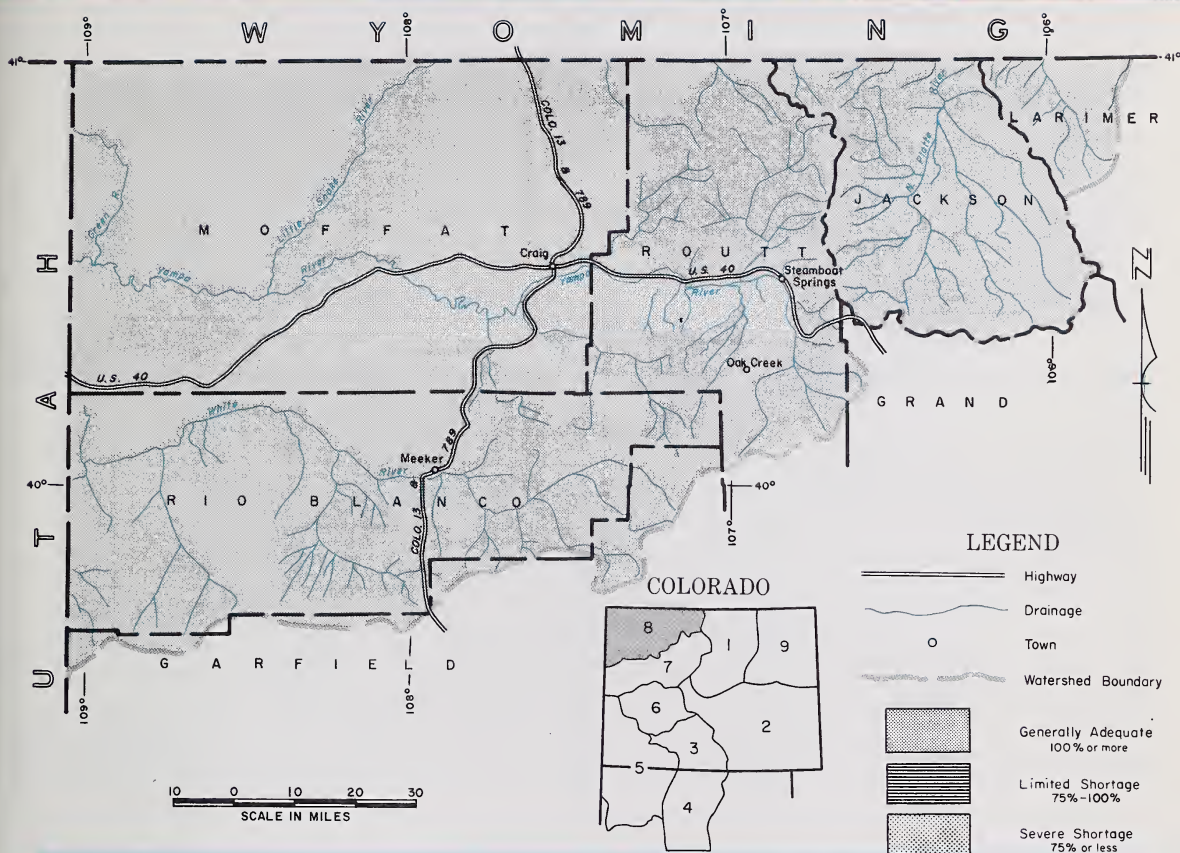
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# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of  
April 1, 1969

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
· COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



## YOUR WATER SUPPLY

WATER SUPPLY FORECASTS ARE ABOVE NORMAL SO WATER SUPPLIES SHOULD BE ADEQUATE THIS SUMMER. ALL FORECASTS ARE THE SAME OR NEAR LAST MONTH, EXCEPT THE YAMPA STREAMFLOW WAS DECREASED ABOUT 10%. THE SNOWFALL DURING MARCH WAS NORMAL. SOIL MOISTURE CONDITIONS IN THE MOUNTAINS ARE SLIGHTLY BELOW NORMAL, HOWEVER, THE SOIL MOISTURE IN THE IRRIGATED AREAS IS REPORTED AS GOOD.

*This report prepared by*

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GLENWOOD SPRINGS, COLORADO

*The Conservation of Water begins with the Snow Survey*

# STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr-Sept

STREAM and STATION	FORE CAST	THIS YEAR % AVE.	15 YR. AVE. 1953-67
Elk at Clark	210	110	191
Laramie at Jelm	111	107	104
Little Snake at Lily	350	126	277
No. Platte at Northgate	265	118	225
White nr Meeker	325	111	293
Yampa nr Maybell	960	113	853
Yampa at Steamboat Spgrs.	285	110	260

# WATER SUPPLY OUTLOOK expressed "Poor,Avg,Good "

STREAM	FLOW PERIOD	
	April May	June Thru Sept.
Canadian River	Good	Good
Hunt Creek	Good	Good
Illinois River	Good	Good
Michigan River	Good	Good
Oak Creek	Good	Good
Trout Creek	Good	Good

## SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES AVERAGED	THIS YEARS SNOW AS PERCENT OF	
		Last Year	Average
Elk	3	102	128
Laramie	2	93	94
North Platte	5	104	107
White	2	102	109
Yampa	6	100	102

## AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of STATIONS	THIS YEARS MOISTURE AS PERCENT OF	
		Last Year	Average
Laramie	2	91	96
North Platte	2	95	80
Yampa	1	78	53

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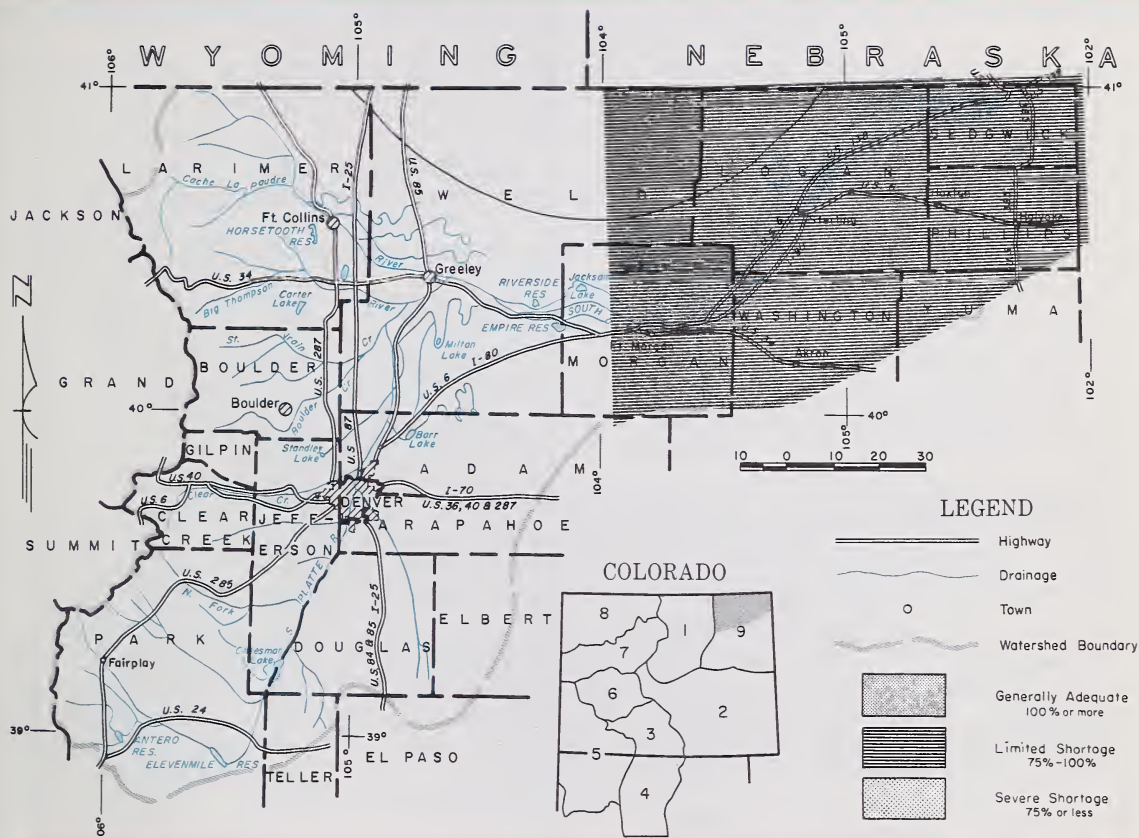
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# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO as of

April 1, 1969

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



## YOUR WATER SUPPLY

WATER SUPPLY FORECASTS WERE LOWERED ABOUT 10% ON THE SOUTH PLATTE TRIBUTARIES THIS MONTH. SNOWFALL WAS DEFICIENT OVER THE ENTIRE SOUTH PLATTE DRAINAGE. MUCH ADDITIONAL SNOWFALL IS NECESSARY TO INSURE ADEQUATE WATER THIS SUMMER. RESERVOIR STORAGE IS GOOD AND WILL HELP OFFSET THE BELOW NORMAL RUNOFF. SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED AS POOR TO FAIR.

This report prepared by  
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*The Conservation of Water begins with the Snow Survey*

# STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr-Sept

# WATER SUPPLY OUTLOOK expressed "Poor,Avg,Good "

STREAM and STATION	FORECAST	THIS YEAR % AVE.	15 YR. AVE. 1953-67
Big Thompson	85	85	100
Boulder at Orodell	42	85	49
Cache La Poudre at Canon Mouth (1)	178	83	215
Clear Creek at Golden (3)	95	80	119
Saint Vrain at Lyons	55	79	70

STREAM	FLOW PERIOD	
	April May	June Thru Sept.
South Platte from Greeley to Fort Morgan	Avg.	Poor
South Platte from Fort Morgan to Sterling	Avg.	Poor
South Platte to below Sterling	Avg.	Poor

## SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES AVERAGED	THIS YEARS SNOW AS PERCENT OF	
		Last Year	Average
Boulder	3	59	73
Big Thompson	5	91	82
Cache La Poudre	7	95	91
Clear Creek	5	75	77
Saint Vrain	3	66	56
South Platte	3	85	79

## AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of STATIONS	THIS YEARS MOISTURE AS PERCENT OF	
		Last Year	Average
South Platte	2	94	103
Clear Creek	2	91	101
Boulder	1	73	94
Saint Vrain	2	74	96
Big Thompson	3	76	88
Cache La Poudre	2	91	96

## RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1953-67
Carter	108.9	91.8	98.9	81.7
Cheesman	79.0	43.2	41.3	49.0
Eleven Mile	97.8	94.6	93.3	72.1
Empire	37.7	32.5	32.5	29.6
Horsetooth	143.5	110.4	111.6	106.8

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1953-67
Jackson	35.4	34.2	34.3	34.0
Julesburg	28.2	20.6	23.1	21.5
Prewitt	32.8	21.2	30.0	16.8
Point of Rocks	70.0	70.6	67.0	58.4
Riverside	57.5	57.5	58.8	49.6

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# APPENDIX I

SNOW COURSE MEASUREMENTS as of April 1, 1969

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG. 53-67
NORTH PLATTE BASIN					
<u>Laramie River</u>					
Deadman	NS			14.2	16.3
McIntyre	3/23	35	10.2	10.4	10.5
Roach	3/25	62	16.8	18.5	18.2
<u>North Platte River</u>					
Cameron Pass	3/25	80	29.3	28.5	26.5
Columbine Lodge	3/29	60	22.0	21.7	23.5
Northgate	3/25	29	7.3	8.0	6.2
Park View	3/27	37	10.3	8.2	8.6
Willow Cr. Pass (B)	3/27	44	14.1	12.1	12.5
SOUTH PLATTE BASIN					
<u>Boulder Creek</u>					
Baltimore	3/29	21	6.2	9.8	5.9
Boulder Falls	3/29	35	9.9	17.5	13.3
University Camp	3/29	43	13.2	22.6	20.7
<u>Big Thompson River</u>					
Deer Ridge	3/30	14	3.3	4.4	5.0
Hidden Valley	3/30	27	7.0	7.6	11.0
Lake Irene (B)	3/26	64	19.3	20.3	20.7
Long's Peak	3/29	30	8.4	10.5	10.7
Two Mile	3/21	41	13.0	13.3	14.5
<u>Cache La Poudre</u>					
Bennett Creek	3/26	25	7.3	7.3	- -
Big South	3/30	0	0.0	0.9	2.4
Cameron Pass	3/25	80	29.3	28.5	26.5
Chambers Lake	3/30	26	7.4	8.1	9.1
Deadman Hill	NS			14.2	16.3
Hour Glass Lake	3/26	24	6.1	6.8	6.8
Joe Wright	3/25	70	22.8	23.9	- -
Lost Lake	3/30	34	7.8	9.3	11.5
Pine Creek	3/27	9	2.7	1.8	1.9
Red Feather	3/27	25	6.3	7.2	7.2
<u>Clear Creek</u>					
Berthoud Falls	3/29	40	11.1	13.4	12.9
Empire	3/29	19	5.5	8.1	7.5
Grizzly Peak (B)	3/26	52	15.8	17.7	17.9
Loveland Lift	3/27	46	13.0	24.0	23.4
Loveland Pass	3/27	49	14.2	16.1	15.4
<u>Saint Vrain River</u>					
Copeland Lake	4/1	9	2.3	4.5	4.4
Ward	3/27	22	4.9	6.5	6.7
Wild Basin	4/1	25	5.7	8.6	11.8
<u>South Platte River</u>					
Como	3/25	24	5.0	8.3	- -
Geneva Park	3/29	15	3.0	3.5	3.5
Horseshoe Mt.	3/24	35	8.3	8.6	- -
Hoosier Pass	3/25	38	9.2	12.3	12.9
Jefferson Creek	3/25	32	8.1	8.0	9.2
Mosquito	3/24	31	7.3	9.3	- -
Trout Cr. Pass	3/24	20	3.8	3.9	- -
ARKANSAS BASIN					
<u>Arkansas River</u>					
Bigelow Divide	3/28	29	5.4	11.2	5.8
Cooper Hill (B)	3/28	41	9.8	13.8	10.6
East Fork	3/27	31	8.2	9.3	9.6
Four Mile Park	3/31	21	5.6	5.0	4.4
Fremont Pass	3/27	48	13.2	16.5	16.1
Garfield	3/28	39	12.3	12.5	13.2
Monarch Pass	3/28	49	16.6	15.0	17.3
Tennessee Pass	3/31	36	9.2	9.4	10.1
Twin Lakes Tunnel	3/31	27	7.6	8.9	10.7
Westcliffe	3/28	27	8.3	12.3	5.4

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG. 53-67
<u>Cucharas River</u>					
Blue Lakes	NS			-	2.9
Cucharas Pass	3/27	37	8.6	11.8	-
LaVeta Pass (B)	3/27	35	10.4	10.2	7.3
<u>Purgatoire River</u>					
Bourbon	3/26	33	7.5	11.1	7.1
RIO GRANDE BASIN-Colo					
<u>Alamosa River</u>					
Silver Lakes	3/26	32	8.6	6.5	5.5
Summitville	4/1	59	19.0	17.9	18.1
<u>Conejos River</u>					
Cumbres	3/26	74	29.4	18.2	18.6
Platoro	3/26	56	19.0	18.0	16.6
River Springs	3/26	28	6.7	5.3	4.8
<u>Culebra River</u>					
Brown Cabin	3/28	27	8.5	3.8	-
Cottonwood (B)	3/28	27	9.1	3.5	-
Culebra	3/27	42	11.0	9.1	8.4
LaVeta Pass (B)	3/27	35	10.4	10.2	7.3
Trinchera (B)	3/29	35	9.2	-	-
<u>Rio Grande</u>					
Cochetopa Pass	3/25	26	5.4	7.5	5.1
Grayback	3/27	54	15.0	-	-
Hiway	3/26	79	28.4	24.9	26.0
Lake Humphreys	3/25	29	7.5	9.5	5.5
Love Lake	3/28	37	10.5	10.7	-
Pass Creek	3/26	43	14.6	13.2	11.1
Pool Table	3/25	25	5.1	7.2	5.9
Porcupine	3/28	35	10.4	11.0	10.1
Santa Maria	3/29	19	5.3	6.0	3.7
Upper Rio Grande	3/24	36	10.3	11.3	6.8
Wolf Cr. Pass	3/26	90	35.2	26.3	27.0
Wolf Cr. Summit	3/26	96	33.7	28.3	28.3
RIO GRANDE BASIN-N.M.					
<u>Pecos River</u>					
Panchuela	3/28	11	3.0	5.0	1.3
<u>Rio Chama</u>					
Bateman	3/28	47	17.0	12.4	11.4
Capulin Peak	4/2	14	4.5	4.4	4.0
Chama Divide	3/26	19	6.6	0.0	1.4
Chamita	3/26	42	15.1	6.9	7.5
<u>Rio Grande</u>					
Aspen Grove	3/27	19	5.3	4.9	3.7
Big Tesuque	3/27	24	7.3	7.3	4.2
Bluebird Mesa	4/2	15	4.8	7.8	3.6
Cordova	3/25	46	13.3	-	10.0
Elk Cabin	3/28	11	3.5	3.5	2.1
Fenton Hill	3/24	23	6.9	5.4	2.7
Mora View	3/26	9	2.9	4.7	-
Pajarito Peak	NS			0.8	0.3
Payrole	3/27	40	13.5	7.4	6.2
Quemazon	3/27	36	10.3	11.0	8.2
Rio En Medio	3/28	33	8.1	8.5	7.7
Sandavol	3/27	22	6.3	8.0	4.5
Taos Canyon	3/27	31	8.5	6.4	3.5
Tres Ritos	3/26	18	7.8	7.9	4.2
<u>Rio Hondo</u>					
Twinning	3/27	50	17.2	9.9	-
<u>Red River</u>					
Hematite Park	3/26	18	4.7	6.6	3.5
Red River	3/26	29	7.3	9.2	5.5

NS - No Survey

(B) - On Adjacent Drainage



# APPENDIX I

SNOW COURSE MEASUREMENTS as of April 1, 1969

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG. 53-67
SAN JUAN-DOLORES BASIN					
<u>Animas River</u>					
Cascade	3/31	46	17.7	14.0	10.8
Lemon	3/28	43	15.5	11.5	-
Mineral Creek	3/31	55	20.3	19.0	13.3
Molas Lake	3/31	47	17.1	14.3	12.6
Red Mountain	3/26	98	35.5	34.6	30.1
Purgatory	3/27	71	27.2	22.4	-
Silverton Sub-Sta.	3/31	28	10.5	10.3	5.1
Spud Mountain	3/26	86	32.8	27.2	23.1
<u>Dolores River</u>					
Lizzard Head	3/28	65	25.1	19.0	16.0
Lone Cone	3/28	57	20.9	15.4	-
Rico	3/28	44	16.1	8.7	5.4
Telluride	3/27	28	9.8	8.4	5.7
Trout Lake	3/27	58	19.1	16.2	13.2
<u>San Juan River</u>					
Chama Divide (B)	3/26	19	6.6	0.0	1.4
Chamita (B)	3/26	42	15.1	6.9	7.5
Upper San Juan	3/26	104	39.4	30.6	30.8
Wolf Cr. Pass (B)	3/26	90	35.2	26.3	27.0
Wolf Creek Summit	3/26	96	33.7	28.3	28.3
GUNNISON BASIN					
<u>Gunnison River</u>					
Alexander Lake	3/28	81	34.5	23.6	21.4
Black Mesa	NS			-	17.6
Blue Mesa	3/28	34	10.6	7.3	7.9
Butte	3/27	53	17.9	14.9	-
Cochetopa Pass (B)	3/25	26	5.4	7.5	5.1
Crested Butte	3/28	47	16.1	13.8	13.3
Keystone	3/27	63	23.2	19.2	19.7
Lake City	3/26	35	8.4	9.6	7.7
Long	NS			-	-
Mesa Lakes (B)	3/26	64	23.9	16.7	17.5
McClure Pass	3/25	53	20.6	16.2	14.6
Park Cone	3/28	44	13.7	9.2	10.9
Park Reservoir	3/27	95	35.5	23.5	23.6
Porphyry Creek	3/28	51	15.4	15.5	16.9
Tomichi	3/28	41	13.9	11.7	12.2
<u>Surface Creek</u>					
Alexander Lake	3/28	81	34.5	23.6	21.4
Mesa Lakes (B)	3/26	64	23.9	16.7	17.5
Park Reservoir	3/27	95	35.5	23.5	23.6
<u>Uncompahgre River</u>					
Ironton Park	3/28	50	16.2	15.9	17.9
Red Mountain Pass	3/26	98	35.5	34.6	30.1
Telluride (B)	3/27	28	9.8	8.4	5.7
COLORADO BASIN (MAIN)					
<u>Blue River</u>					
Blue River	3/25	33	7.8	8.7	8.5
Fremont Pass	3/27	48	13.2	16.5	16.1
Frisco	3/26	25	6.3	7.3	7.5
Grizzly Peak	3/26	52	15.8	17.7	17.9
Hoosier Pass (B)	3/25	38	9.2	12.3	12.9
Shrine Pass	3/26	56	16.7	16.8	17.4
Snake River	3/26	31	8.3	8.6	7.6
Summit Ranch	3/28	26	6.7	7.0	7.1

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	Avg 53-67
<u>Colorado River</u>					
Arrow	3/27	39	12.1	12.0	11.8
Berthoud Pass	3/27	47	12.4	16.1	14.5
Berthoud Summit	3/29	51	14.5	18.2	19.3
Cooper Hill	3/28	41	9.8	13.8	10.6
Fiddler Gulch	3/28	47	13.1	14.4	15.1
Glen Mar Ranch	3/27	33	8.7	8.1	7.9
Gore Pass	3/28	34	10.6	9.8	10.0
Grand Lake	3/25	34	8.5	8.7	8.2
Lake Irene	3/26	64	19.3	20.3	20.7
Lapland	3/26	33	8.7	9.4	9.9
Lulu	3/31	47	15.2	17.8	17.0
Lynx Pass	3/28	43	13.7	13.7	12.0
Middle Fork	3/27	37	10.9	9.5	9.1
Milner	3/26	47	13.8	12.0	13.3
North Inlet	3/25	32	9.1	9.3	8.7
Pando	3/27	38	11.0	8.8	10.4
Phantom Valley	3/26	42	11.7	11.1	10.4
Ranch Creek	3/27	34	8.6	9.8	9.4
Tennessee Pass	3/31	36	9.2	9.4	10.1
Vail Pass	3/26	48	15.2	17.0	17.1
Vasquez	3/27	41	10.9	12.1	12.4
<u>Roaring Fork River</u>					
Aspen	3/29	56	18.2	13.1	16.4
Chapman	3/25	49	13.5	12.4	-
Independence Pass	3/31	46	13.9	15.7	17.7
Ivanhoe	3/26	58	17.2	17.6	17.9
Kiln	3/26	43	11.9	9.8	-
Last Chance	3/25	36	10.3	9.2	-
Lift	3/29	54	18.1	14.3	19.0
McClure Pass	3/25	53	20.6	16.2	14.6
Nast	3/26	28	7.9	6.2	5.3
North Lost Trail	3/25	56	21.0	15.1	14.1
<u>Williams Fork River</u>					
Glen Mar Ranch	3/27	33	8.7	8.1	7.9
Jones Pass	3/26	49	13.6	16.0	
Middle Fork	3/27	37	10.9	9.5	9.1
<u>Willow Creek</u>					
Granby	3/27	27	7.5	6.5	7.5
Willow Creek Pass	3/27	44	14.1	12.1	12.5
<u>Plateau Creek</u>					
Mesa Lakes	3/26	64	23.9	16.7	17.5
Park Reservoir	3/27	95	35.5	23.5	23.6
Trickle Divide	3/27	92	34.5	26.9	25.2
YAMPA BASIN					
<u>Elk River</u>					
Clark	3/27	40	13.5	11.8	10.0
Elk River	3/27	57	20.2	18.9	16.8
Hahn's Peak	3/27	49	17.1	15.3	12.9
<u>White River</u>					
Burro Mountain	3/28	51	19.4	19.6	17.0
Rio Blanco	3/27	47	16.4	15.6	15.8
<u>Yampa River</u>					
Bear River	3/28	41	11.4	11.6	11.1
Columbine (B)	3/29	60	22.0	21.7	23.5
Dry Lake	3/29	55	20.7	20.9	19.9
Lynx Pass (B)	3/28	43	13.7	13.7	12.0
Rabbit Ears	3/29	69	25.5	25.3	25.7
Yampa View	3/29	40	15.3	15.4	14.3

NOTE:

NS - No Survey

(B) - On Adjacent Drainage

# APPENDIX II

SOIL MOISTURE MEASUREMENTS as of April 1, 1969

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
<u>North Platte River</u>					
Muddy Pass	3/29	11.1	3.9	6.2	6.4
Willow Pass	3/27	9.5	6.3	4.5	6.3
SOUTH PLATTE BASIN					
<u>Boulder Creek</u>					
Alpine Camp	3/21	6.9	3.2	4.4	3.4
<u>Big Thompson River</u>					
Beaver Dam	3/21	7.1	3.2	4.3	3.3
Guard Station	3/21	6.9	2.9	4.8	3.6
Two Mile	3/21	9.1	4.3	4.6	4.9
<u>Clear Creek</u>					
Clear Creek	3/27	9.5	4.7	5.2	5.0
Hoop Creek	3/27	4.9	3.0	3.3	2.6
<u>Cache La Poudre River</u>					
Feather	3/21	10.1	4.2	4.2	4.0
Laramie Road	3/30	12.4	6.2	7.2	6.8
<u>South Platte River</u>					
Hoosier Pass	3/25	7.8	4.4	4.8	4.3
Kenosha Pass	3/25	4.4	2.1	2.1	2.0
ARKANSAS BASIN					
<u>Arkansas River</u>					
Garfield	3/28	6.7	2.5	5.6	3.5
Leadville	3/27	7.8	3.2	5.6	3.7
Twin Lakes Tunnel	3/27	4.5	1.0	3.2	2.5
RIO GRANDE BASIN - COLORADO					
<u>Conejos River</u>					
Mogote	3/31	10.7	9.0	5.6	6.0
<u>Rio Grande</u>					
Alberta Park	4/2	8.2	5.7	5.8	4.7
Bristol View	3/28	6.1	2.6	2.4	3.4
LaVeta Pass	3/28	11.9	10.7	9.8	8.7
RIO GRANDE BASIN - NEW MEXICO					
<u>Rio Chama</u>					
Bateman	NS	6.7		4.3	3.2
Chamita	3/26	8.0	4.3	5.8	4.1
<u>Rio Grande</u>					
Aqua Piedra	3/25	7.2	2.7	4.0	3.7
Big Tesuque	3/27	3.7	2.0	2.4	1.9
Fenton Hill	NS	6.5		4.5	5.1
Rio En Medio	3/27	3.5	1.8	1.5	1.2
Taos Canyon	3/27	3.3	2.0	2.3	2.3
<u>Red River</u>					
Red Summit	3/26	4.8	1.6	1.5	1.9
ANIMAS-SAN JUAN BASINS					
<u>Animas River</u>					
Cascade	3/31	9.1	3.6	5.7	6.9
Mineral Creek	3/26	5.7	2.2	2.9	3.5
Molas Lake	3/26	9.4	5.3	5.7	4.4
<u>Dolores River</u>					
Dolores	3/28	19.6	2.4	13.5	8.0
Lizzard Head	3/28	11.8	3.1	7.7	7.1
Rico	3/28	13.8	5.7	12.6	8.3

# APPENDIX II

SOIL MOISTURE MEASUREMENTS as of April 1, 1969

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
GUNNISON BASIN					
<u>Gunnison River</u>					
King	3/28	3.3	1.5	2.8	1.9
COLORADO BASIN (MAINSTEM)					
<u>Blue River</u>					
Blue River	3/25	4.2	2.5	2.5	2.4
<u>Colorado River</u>					
Berthoud Pass	3/25	3.9	1.7	2.5	2.5
Gore	3/28	4.9	2.5	2.5	2.6
Grand Mesa	3/27	12.5	9.0	NS	9.0
Ranch Creek	3/27	8.7	4.9	5.7	5.3
Vail	3/27	12.3	10.7	6.8	6.5
<u>Roaring Fork River</u>					
Placita	3/26	9.3	4.9	7.5	6.5
YAMPA BASIN					
<u>Yampa River</u>					
Hahn's Peak	3/27	19.0	6.1	7.8	11.4

ALL PROFILES 4 FEET DEEP



# LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

## STATE

Colorado State Engineer  
New Mexico State Engineer  
Nebraska State Engineer  
Colorado Experiment Station  
Rocky Mountain Forest and Range Experiment Station

## FEDERAL

Department of Agriculture  
Forest Service  
Soil Conservation Service

Department of Interior  
Bureau of Reclamation  
Geological Survey  
National Park Service  
Indian Service

Department of Commerce  
Weather Bureau

War Department  
Army Engineer Corps  
Atomic Energy Commission

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Colorado Public Service Company  
Public Service Company of New Mexico

## MUNICIPALITIES

City of Denver                      City of Greeley  
City of Boulder                      City of Fort Collins

## WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association  
Colorado River Water Conservation District

## IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company  
San Luis Valley Irrigation District  
Santa Maria Reservoir Company  
Costilla Land Company  
Uncompahgre Valley Water Users' Association  
Twin Lakes Reservoir and Canal Company  
Trinchera Irrigation Co.

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

SNOW SURVEY UNIT  
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